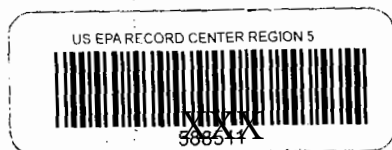


976648



SITE ASSESSMENT AND
EMERGENCY ACTION PLAN
FOR
PRAIRIE PAINT AND ADHESIVES
MAHOMET, ILLINOIS

Prepared For:
U.S. Environmental Protection Agency
Region V
536 S. Clark Street
Chicago, Illinois

CONTRACT NO. 68-01-6669

TAT-05-F-00241

TDD# 5-8312-01

Prepared by:
WESTON-SPER
Technical Assistance Team
Region V

December 1983

1.0 SITE HISTORY

On 11 June 1982, an Interim Status Standards Inspection was conducted at the Prairie Paint and Adhesive Company site in Mahomet, Illinois, by the Illinois Environmental Protection Agency (IEPA). A telephone conversation with Mr. Jack Waaler, of Waaler, Evans, and Gordon, Attorneys at Law, representing the CNB Trust, the bank handling the Campbell Estate on whose property the paint company is located, instigated this action.

On 2 May 1983, Region V DPO Robert Bowden requested the Technical Assistance Team (TAT) to assist OSC Bill Simes in conducting a site assessment.

The purpose of the inspection was to determine the facility's compliance with the Illinois Administrative Code (RCRA). During the inspection, it was noted by Glen Savage (IEPA) that the facility that Mr. Waaler represented was not operating. It was stated to Mr. Waaler that before the facility could be completely closed under 35 Illinois Administrative Code, the 81 barrels of waste must be sampled, identified and properly disposed at a permitted IEPA disposal facility. After the waste is disposed, the facility can then be closed.

After looking more thoroughly into the barrel situation at the Mahomet site, Mr. Waaler discovered that his client (Campbell Trust) did not even own the subject barrels. The barrels belonged to a Mr. Bean who reprocessed and sold the paint inside; unfortunately, Mr. Bean Non-responsive, G [REDACTED] [REDACTED] [REDACTED]

Further investigation revealed that the 55 gallon barrels were located on 3 different properties, owned by 3 different owners. Some are located on the Peoria & Eastern Railroad land. Some are on Lot #2 which belongs to the Campbell Estate. The rest are on Lot #3 which belongs to Alpha Material Company (now apparently known as Central Material Co.). A map showing the site locations is shown in Figure 1.

On 11 May 1983, G. Steele and R. Johnson from IEPA arrived at the Mahomet site and sampled 8 barrels and took a composite sample from material lying on the ground amidst the barrels. These samples were tested for pH, EP toxicity metals and flash point. In addition, an organic scan was performed. The only sampling results received so far are for flash point. The barrels' physical observations and flashpoint results are shown in Table 1:

TABLE 1
SAMPLING RESULTS

Barrel #	Flash Point (F°)	Physical Observations
1	- ^{1/}	North of facility building-- thick, silver resinous material, solvent odor.
2	105°	North of facility building-- light greenish yellow liquid. Dark green sludge in bottom of barrel.
3	105°	North of facility building-- yellow-green liquid with sludge in bottom of barrel.
4	-	North of facility building-- thick silver resinous material.
6	73°	North of facility building-- thick yellow liquid, strong solvent odor.
7	73°	North of facility building-- thick liquid solvent odor.
8	-	North of facility building-- black to brown thick liquid. Sample taken from outside top of barrel.
9a	-	North of facility building-- rusty red resinous material sampled from outside top of barrel.
9b	102°	North of facility--clear yellow liquid with green sludge in bottom of barrel.
Soil Composite	-	Composite of 5 samples taken from material laying on the ground near barrels. Dark resinous material.

^{1/} Missing flash point values indicate unclear data received from IEPA.

2.0 SITE ASSESSMENT

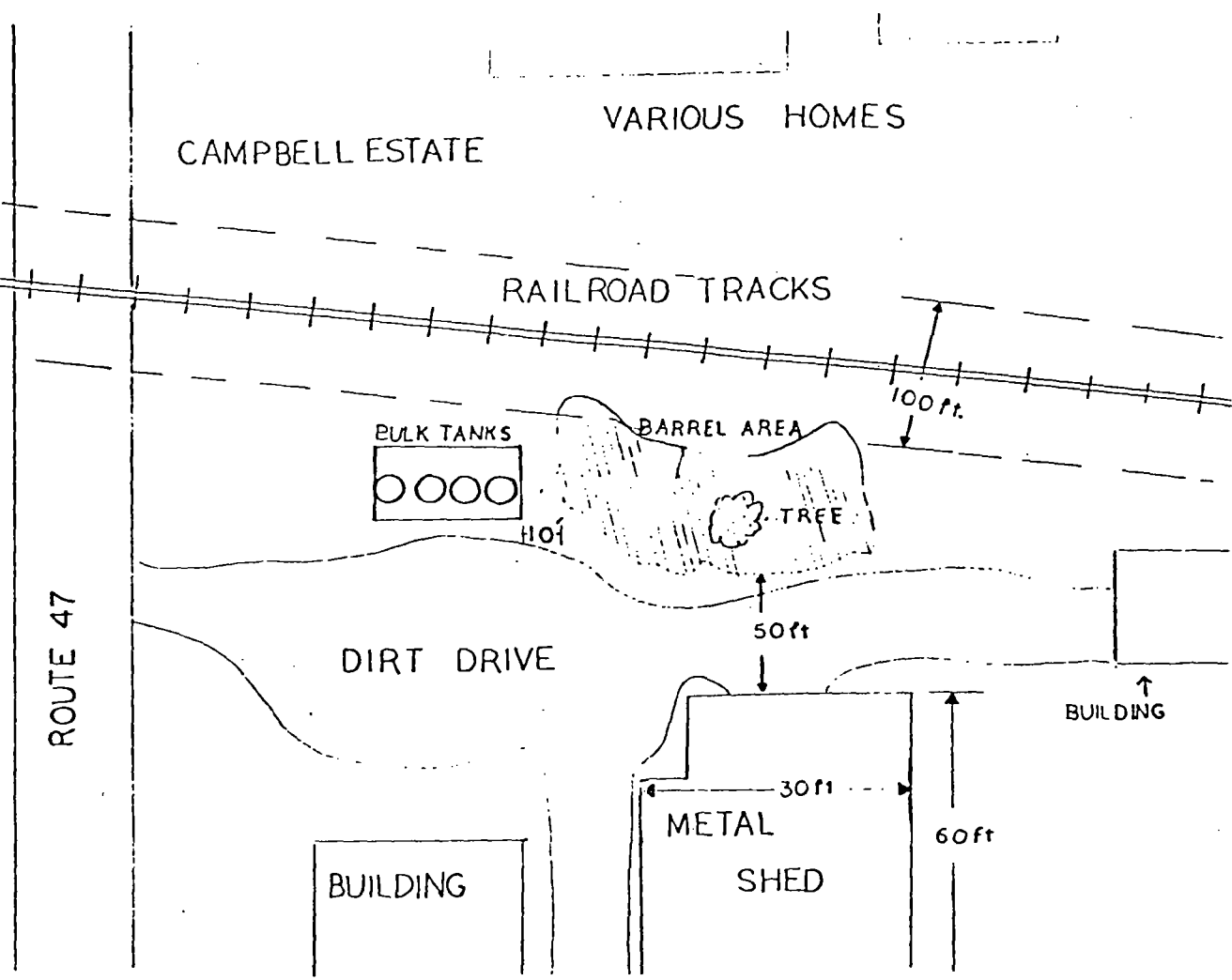
OSC Bill Simes and TAT member Scott Ferris conducted a preliminary site assessment on 27 May 1983. The Prairie Paint & Adhesive site is located on the SW 1/4 of Section 15, Township 20 and Range 7E. This area of Illinois is known for its glacial till comprised of sand and gravel with clay lenses.

The site (Figure 1) is bordered on the north by the Peoria & Eastern Railroad tracks, State Route 47 on the west, a metal shed on the south, and a small abandoned building to the east. At the time of the site assessment, the only site security was the occasional patrol by the Mahomet Police Department. Adjacent to the site is a small bulk storage facility operated by Parker Oil and leased from Alpha Material Company (Central Material Co.) controlled by Mr. James Acheson. Some of the barrels were as close as 10 feet from the bulk tanks. The Sangamon River flows south along the east site boundary approximately 1/4 mile from the barrels. The Sangamon River flows into the Illinois River.

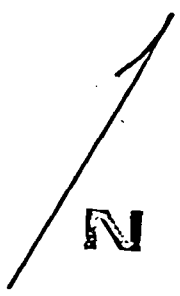
OSC Simes and Scott Ferris met with William Zierath (IEPA), David Jansen (IEPA), Don Karr (Karr & Associates Real Estate), and Jack Waaler (Attorney) at the site on 27 May 1983.

Soil surrounding the leaking barrels have been contaminated by the leaking barrels' contents. It appears that there are three types of barrels. The first group apparently contains an amber-colored adhesive. The number of these drums is approximately 35 with 20 of these barrels leaking. The second type apparently contains U.S. military camouflage paint. They number approximately 35 with 20 barrels intact and not leaking and 15 leaking or open to the environment. These 15 barrels all contain paint sludge with most of the volatile agent gone. The contents from the third barrel types are unknown. The barrel construction is different from the paint and adhesive barrels.

After this brief inspection, it was decided by all parties attending that these barrels posed an immediate hazard due to their low flash point (73°F), proximity to the bulk tanks (10 ft), and proximity to residential areas (200 ft). It was decided to move the barrels to the abandoned metal shed on



NOT TO SCALE
sf 6-83



the south side of the property. Mr. Waaler contacted Mr. Jim Tull to move the barrels to their shed.

At the present time, the barrels are in the metal shed on visqueen. The barrels are in rows to be either sampled or staged. The trustees of the property have been notified to remove and dispose of the barrels.

3.0 HEALTH AND ENVIRONMENTAL HAZARDS

The site conditions at Mahomet represent an imminent threats to human health and the environment. Health and environmental threat center on the 81 barrels of leaking organics with flash points as low as 73°F. These barrels were originally situated 10 ft from bulk storage tanks containing petroleum products. The proximity of these barrels to the bulk tanks posed an explosion threat. This threat has been reduced by the removal of the leaking barrels to an abandoned shed on site which is approximately 100 ft from the bulk tanks. In addition to the explosion hazard, the drums are leaking an unknown organic liquid onto the soil. The probability that this viscous liquid would reach any navigable water is slim; although soil contamination presently exists. The lack of site security coupled with the site's proximity to a populated area magnify the potential for direct human exposure.

4.0 RECOMMENDED ACTION

An Immediate Removal Action should be conducted. It could be done in 3 phases: characterization (sampling and analysis); drum overpacking and overpack transport for disposal; and contaminated soil cleanup. Preliminary characterization information about the waste indicates incineration may be the most cost effective method for disposal. More accurate characterization of the material may reveal a percentage of the material to be amenable for a different handling method such as landfill or recovery. Alternate handling methods are identified in this report which will be implemented if more accurate characterization reveals the material may be handled using a more cost-effective alternate method.

This Emergency Action should be conducted as follows:

4.1 Sampling and Analysis Plan

The following plan should be implemented to determine the cost-effective disposal mechanisms:

- o The drums should be segregated according to similar waste type. This can be accomplished by visually inspecting the contents of each drum and moving these drums to a location where similar wastes are being staged. Preliminary information indicates at least 3 basic waste types are present among the 81 drums as indicated above.
- o Each drum within an identified group should be numbered, then opened and sampled. An 8 oz sample should be collected from each drum and placed in a clean 8 oz glass jar. The jar should be properly labeled indicating the sample origin.
- o A composite sample should then be prepared by removing approximately one-half ounce from each jar and placing it into a glass or stainless steel beaker. This sample should then be homogenized and placed in two 8-oz glass jars with appropriate labels. All remaining samples should be retained if further analysis becomes necessary.
- o One of the two 8 oz. composite jars should be forwarded to an analytical laboratory and the other sample retained by the samplers for future reference. The analytical laboratory must be competent and have an appropriate quality control and quality assurance program to ensure the accuracy of analytical results.
- o The composite samples should be analyzed for:

Physical Characteristics

BTU
Flash Point
Percent solids
Ash
Reactivity

Inorganics

pH

CN

Cl,%

SO⁴,%

Halogens, %

ICAP Metals

Organics

An organic scan should be performed and the results should be reported in percent of major components.

- o The results of this analysis will determine the acceptability of a particular disposal method. It is important to note that the potential disposal facilities selected to handle the material should be consulted prior to finalizing analytical parameters as a particular facility may require additional parameter analysis.

4.2 Drum Overpacking

Drum handling should take place according to the following steps:

- o For purposes of the Action Plan, it is assumed all 81 drums will be in sufficiently deteriorated condition to require overpacking prior to shipment to the disposal facility. It is also recommended that five extra overpacks be obtained to handle any spillage or contaminated soil requiring disposal.
- o The drums should be loaded into the overpacks using a backhoe equipped with a sling or a drum handler. Caution should be used during this operation to avoid spillage of material.
- o The outside of the overpack should be labeled indentifying the overpack contents, i.e., group and drum number. The drum should also be labeled according to U.S. DOT labeling requirements and U.S. EPA labeling requirements for hazardous wastes.
- o Overpack lids should be tightly secured.

- o After all drums have been overpacked, labels, and contaminated soil placed in overpacks, the drums should then be loaded onto a truck trailer. Approximately 70 overpack drums can be loaded onto one trailer.
- o The loading of the drums should be accomplished using the bucket on the backhoe or with the drum handler. Once the drums are on the trailer, they can be positioned using a hand cart.
- o A hazardous waste manifest must be prepared prior to shipment and contain all required information. Some states have special requirements for manifested shipments originating, terminating or passing through that particular state. These requirements should be checked for each state the shipment will be entering. It is also important to confirm that the transporter is permitted to haul waste in each of these states.
- o The transport vehicle must be properly placarded prior to leaving the site. It is the responsibility of the waste generator or cleanup contractor to provide these placards.

4.3 Disposal

For purposes of this Action Plan, it is assumed all waste will be amenable for disposal at a permitted, hazardous waste incinerator.

More accurate characterization may reveal a substantial percentage of this waste could be handled in a more cost-efficient manner. Upon receipt of the analytical data, the following options may present themselves:

- o Some of the currently uncharacterized materials may have recycling value. These wastes may be transported to the recovery facility in overpacks or bulked for transport to the facility.

- o Some of the material may be amenable for landfilling. These wastes may be transported in overpack to a permitted disposal facility.

This option may incorporate solidification at the disposal facility. It is not recommended that any solidification occur at the cleanup site as this will increase cleanup costs and waste transport volume requiring disposal.

- o Other treatment methods, such as neutralization or chemical reaction, may also become feasible based on analytical results.

It is important to compare all potential disposal methods' cost prior to committing to a particular method.

4.4 Soil Decontamination

A visual inspection of the site will be conducted. Areas of suspected contamination will be further evaluated with field organic vapor detection equipment (OVA).

If necessary, contaminated soil at the site should be removed. The decision to conduct this operation should be based on both the degree of soil contamination and contaminant characteristics. The decision to require removal of contaminated soil should be made by U.S. EPA or a state environmental regulatory agency. The contaminated soil should be handled as described above at an appropriate disposal facility.

5.0 COST

The following cost estimates have been developed, assuming all wastes will be amenable for incineration. As indicated, more cost-effective methods for disposal may become feasible, based on analytical results.

This cost estimate includes cost for removal and disposal of up to six overpack drums containing contaminated soil.

TABLE 2
ESTIMATED CLEANUP COST

Labor:

1 Supervisor, \$50/hr x 40 hr	\$2,000.00
1 Foreman, \$35/hr x 40 hr	1,400.00
1 Operator, \$25/hr x 40 hr	1,000.00
4 Laborers, \$20/hr x 40 hr	3,200.00
Per diem, \$65/day x 5 days x 7 men	2,300.00

Equipment:

Personnel protection \$100/day x 6 men x 5 days	3,000.00
86 steel overpack drums x \$100/drum	8,600.00
1 Backhoe with grapppler, \$70/hr x 40 hr	2,800.00
Lowboy	
Transport trailer dead-head time \$50/hr x 8 hr	400.00

Transport:

\$4/loaded mile x 250 miles x 2 trucks	2,000.00
--	----------

Disposal:

Incineration at LWD in Calvert, Kentucky \$90/drum x 86 drums	7,740.00
--	----------

Sample and Analysis

Labor	1,740.00
Equipment	400.00
Analysis	7,500.00

TAT:

\$300/day x 10 days	3,000.00
OSC's report	2,000.00

EPA:

\$350/day x 10 days	2,500.00
---------------------	----------

<u>Contingency: (10%)</u>	<u>5,200.00</u>
---------------------------	-----------------

Total Project Cost	\$56,780.00
--------------------	-------------